

hybridizes to a complement of SEQ ID NO: 1 under stringent conditions; wherein said isolated and purified oligonucleotide is capable of amplifying a portion of the 5' untranslated region and Exon 1 of a *Dihydropyrimidine dehydrogenase (DPD)* mRNA isolated from fixed and paraffin embedded (FPE) tissue when used with SEQ ID NO: 2,

and;

an oligonucleotide having the sequence SEQ ID: 2 or an oligonucleotide primer at least 80% identical therewith and hybridizes to a complement of SEQ ID NO: 2 under stringent conditions; wherein said isolated and purified oligonucleotide is capable of amplifying a portion of the 5' untranslated region and Exon 1 of a *Dihydropyrimidine dehydrogenase (DPD)* mRNA isolated from fixed and paraffin embedded (FPE) tissue when used with SEQ ID NO: 1;

- (d) comparing the amount of *Dihydropyrimidine dehydrogenase (DPD)* mRNA from step (c) to an amount of mRNA of an internal control gene.

17. (Twice Amended) A method of determining the relative level of *Dihydropyrimidine dehydrogenase (DPD)* gene expression in a tissue sample comprising;

- (a) obtaining a tumor sample from a patient;
 - (b) isolating mRNA from said tumor sample;
 - (c) determining the amount of *Dihydropyrimidine dehydrogenase (DPD)* mRNA by amplifying the mRNA using an oligonucleotide primer having the sequence of SEQ ID: 7, or an oligonucleotide primer at least 80% identical therewith and hybridizes to a complement of SEQ ID NO: 7 under stringent conditions; wherein said isolated and purified oligonucleotide is capable of amplifying a portion of Exon 6 of a *Dihydropyrimidine dehydrogenase (DPD)* mRNA isolated from fixed and paraffin embedded (FPE) tissue when used with SEQ ID NO: 8,
- and;